Formative Assessment Task

2nd Grade: Measurement and Data

### 2. MD. 9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

Learning Target:

· I can create a line plot with a horizontal scale marked off in whole-number units.

· I can record length measurements on a line plot.

**Materials:**

1. Line Plot page. (See below)
2. Game cards. (See below)

**Directions:**

*This Formative Assessment is designed to be a center or partner activity.*

1. Make a folder game using the Line Plot page below. Multiple copies of the Line Plot Page will go into the folder.
2. Include the Game Cards in the folder along with a pencil for student use with directions glued on the cover. Consider laminating or printing the cards on cardstock.

*Note: This activity includes predetermined measurement cards. To address the standard fully, have students progress towards actually measuring before plotting.*

**Considerations:**

* Observe the student lines up the end of the object with the end of the ruler in other tasks.
* Observe that student correctly uses the inch side of the ruler what asked to measure inches and the centimeter side when asked to measure centimeters in other tasks.
* Observe that the student clearly marks an “x” on the line plot in an appropriate place.



Line Plot Fun

Line Plot Fun

Directions:

1. Take a Line Plot Fun page.
2. Spread the Line Plot Fun cards face down.
3. Label the axis of your line plot 1-10 inches.
4. Turn the cards over one at a time.
5. Record the measurements you see on the cards onto the Line Plot.

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| --- | --- | --- | --- |
| 10 inches  :::::Applications:Microsoft Office 2008:Office:Media:Clipart: Household.localized:AA009679.png | 1 inch  :::::Applications:Microsoft Office 2008:Office:Media:Clipart: Household.localized:AA009659.png | 4 inches  http://www.h2ouniversity.org/assets/images/clipart/clipart_pencil95.gif | 8 inches  [https://encrypted-tbn2.google.com/images?q=tbn:ANd9GcQRbLG2lR3cgNdv6HXMcLLrwqhGY-iGEv36QUnu4wyZA9hplWTt](http://www.google.com/imgres?hl=en&safe=active&client=firefox-a&hs=WQ8&sa=X&rls=org.mozilla:en-US:official&biw=947&bih=416&tbm=isch&prmd=imvns&tbnid=lwJeJ9GH2JHBMM:&imgrefurl=http://www.eclipsusa.com/product_info.php?products_id=175&osCsid=4d..&docid=xs8aM5GClp_a4M&imgurl=http://www.eclipsusa.com/images/01988.jpg&w=600&h=600&ei=4ygEULzaBOrd6wHh6KDyBg&zoom=1&iact=hc&vpx=172&vpy=67&dur=760&hovh=225&hovw=225&tx=112&ty=174&sig=115524028999267895816&page=1&tbnh=100&tbnw=100&start=0&ndsp=14&ved=1t:429,r:1,s:0,i:79) |
| 6 inches  http://www.cksinfo.com/clipart/construction/tools/scissors/scissors-2.png | 2 inches  http://www.clipartpal.com/_thumbs/pd/education/eraser.png | 3 inches  http://www.cksinfo.com/clipart/toys/crayons/crayon-black-1.png | 4 inches  http://urbanext.illinois.edu/soil/less_pln/crayon/p250.gif |
| 10 inches  [lip Art: Lunch Box Red](http://www.abcteach.com/free/l/lunchboxredrgb.jpg) | 4 inches  [lip Art: Glue B&W](http://www.abcteach.com/free/g/gluebnw.jpg) | 1 inch  [terling Silver Paperclip Money Clip](http://www.cufflinksdepot.com/mm5/graphics/00000002/lg/H95202202.jpg) | 1 inch  http://cdn3.fotosearch.com/bthumb/UNC/UNC109/u11865458.jpg |
| 5 inches  http://www.hasslefreeclipart.com/clipart_artsupplies/pencil_sharpener2_100.jpg | 1 inch  http://images.christmastimeclipart.com/images/2/1243376729415_493/img_1243376729415_4931.jpg | 1 inch  S Quarter front | 5 inches  http://whsword.files.wordpress.com/2011/02/united_states_one_dollar_bill_obverse.jpg |

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| Teacher notes:  Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.  Students who demonstrate complete mastery correctly label the axis of the line plot and correctly use one x for each measurement on the line plot.  Students who demonstrate partial accomplishment may label the axis incorrectly (i.e. the numbers are not in numerical order) or students may draw 2 x’s for a 2 inch measurement instead of drawing one x. |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Not yet:** Student shows evidence of misunderstanding, incorrect concept or procedure | | | **Got It:** Student essentially understands the target concept. | | | | **NEEDS IMPROVEMENT**  **(N)** | | **WITH ASSISTANCE**  **(W)** | | | **INDEPENDENT**  **(I)** | | **0 Unsatisfactory:**  **Little Accomplishment**  The task is attempted and some mathematical effort is made. There may be fragments of accomplishment but little or no success. Further teaching is required. | **1 Marginal:**  **Partial Accomplishment**  Part of the task is accomplished, but there is lack of evidence of understanding or evidence of not understanding. Further teaching is required. | | **2 Proficient:**  **Substantial Accomplishment**  Student could work to full accomplishment with minimal feedback from teacher. Errors are minor. Teacher is confident that understanding is adequate to accomplish the objective with minimal assistance. | **3 Excellent:**  **Full Accomplishment**  Strategy and execution meet the content, process, and qualitative demands of the task or concept. Student can communicate ideas. May have minor errors. | |   Adapted from Van de Walle, J. (2004) Elementary and Middle School Mathematics: Teaching Developmentally. Boston: Pearson Education, 65 |